

1 **IN THE CLAIMS**

2 Please cancel claims 1-3 and add new claims 4-28. This listing of claims will replace all
3 prior versions and listings of claims in this application.

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5 --1. - 3. (**Canceled**)

6
7 4. (**New**) A computer switching system comprising:

8 a user interface device for multiplexing signals output from a connected keyboard and
9 cursor control device and for providing an interface to a video display;

10 a switch unit for enabling communication between said user interface device and a
11 plurality of remotely located computers, said switch unit coupled to said user
12 interface device by a single first connection; and

13 a plurality of computer interface modules each coupled to said switch unit by a single
14 second connection, each of said computer interface modules coupled to at least
15 one of said remotely located computers;

16 wherein video signals output from said remotely located computers are transmitted to said
17 video display via said switch unit;

18 wherein said user interface device transmits signals from said keyboard and said cursor
19 control device to said switch unit; and

20 wherein said switch unit interprets said keyboard and said cursor control device signals,
21 generates emulated keyboard and cursor control device signals and transmits said emulated
22 keyboard and cursor control device signals to a select one of said remotely located computers.

1 5. (New) A system according to claim 4, wherein said first and second connections each
2 comprise a series of twisted pair conducting wires.

3
4 6. (New) A system according to claim 5, wherein each component of said video signals is
5 transmitted on one of said twisted pair conducting wires of said first and second connections, and
6 wherein said keyboard and cursor control device signals are transmitted on a separate one of said
7 twisted pair conducting wires.

8
9 7. (New) A system according to claim 6, wherein a synchronization signal is transmitted with on
10 of said components of said video signals on one of said twisted pair conducting wires.

11
12 8. (New) A system according to claim 7, wherein said synchronization signal is decoded by said
13 user interface device.

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15 9. (New) A system according to claim 5 wherein command data is transmitted with said
16 keyboard and cursor control signals on a separate one of said twisted pair conducting wires.

17
18 10. (New) A system according to claim 9, wherein said switch unit interprets said command
19 data.

20
21 11. (New) A system according to claim 4, wherein each of said plurality of computer interface
22 modules receives power from one of said remote computers.

1 12. (New) A system according to claim 4, wherein said user interface device comprises circuitry
2 for amplifying said video signals.

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4 13. (New) A system according to claim 12, wherein said circuitry for amplifying said video
5 signals analyzes a synchronization signal to determine a level of amplification.

6
7 14. (New) A system according to claim 13, wherein said circuitry for amplifying said video
8 signals amplifies a frequency component of said video signals.

9
10 15. (New) A system according to claim 14, wherein said level of amplification for said
11 frequency component is determined by the shape of said synchronization signal.

12
13 16. (New) A system according to claim 13, wherein said synchronization signal is a horizontal or
14 vertical synchronization signal.

1 17. (New) A computer switching system comprising:

2 a user station including a keyboard, cursor control device and video display;

3 a switch for enabling communication between said user station and a plurality of remotely

4 located computers, wherein said switch is coupled to said user station by a first

5 connection; and

6 a plurality of computer interface modules each coupled to a communication circuit of one

7 of said plurality of remote computers and each of said computer interface modules

8 coupled to said switch by a second connection;

9 wherein said user station provides keyboard and cursor control device signals to said

10 switch;

11 wherein said switch interprets said keyboard and cursor control device signals, emulates

12 said keyboard and cursor control device signals, and transmits said emulated keyboard and cursor

13 control device signals to one of said remote computers;

14 wherein one of said computer interface modules receives video signals having red, green,

15 and blue components from one of said remote computers and encodes synchronization signals

16 onto at least one of said components for transmission to said user station through said switch;

17 and

18 wherein said user station analyzes said encoded synchronization signals to automatically

19 amplify one or more frequency components of said video signals.

1 18. (New) A system according to claim 17, wherein each of said computer interface modules
2 receives power from one of said remotely located computers.

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4 19. (New) A system according to claim 17, wherein said first and second connections each
5 comprise a series of twisted pair conducting wires.

6
7 20. (New) A system according to claim 19, wherein each component of said video signals is
8 transmitted on one of said twisted pair conducting wires of said first and second connections, and
9 wherein said keyboard and cursor control device signals are transmitted on a separate one of said
10 twisting pair conducting wires.

11
12 21. (New) A system according to claim 17, wherein said synchronization signals are encoded as
13 negative signals.

14
15 22. (New) A system according to claim 17, wherein said synchronization signals comprise
16 horizontal or vertical synchronization signals.

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18 23. (New) A system according to claim 17, wherein said user station compares said
19 synchronization signals to a signal of known shape to determine a degradation of said
20 synchronization signals.

1 24. (New) A system according to claim 23, wherein said user station amplifies said one or more
2 frequency components of said video signals to compensate for said degradation.

3
4 25. (New) A method for remotely operating a remote computer, said method comprising the
5 steps of:

6 receiving keyboard signals from a local keyboard at a user station;

7 receiving cursor control device signals from a local cursor control device at said user
8 station;

9 transmitting said keyboard and cursor control device signals to a central switch;

10 interpreting said keyboard and cursor control device signals, said central switch including

11 a circuit for producing emulated keyboard and cursor control device signals at said

12 central switch;

13 transmitting said emulated keyboard and cursor control device signals to said remote

14 computer;

15 receiving video signals at said central switch from said remote computer in response to

16 said emulated keyboard and cursor control device signals;

17 transmitting said video signals to said user station; and

18 amplifying at least one frequency component of said video signals to produce tuned video
19 signals for display at said user station.

26. (New) A method according to claim 25, said method further comprising the step of:
encoding synchronization signals onto said video signals from said remote computer.

27. (New) A method according to claim 26, further comprising the step of:

analyzing said synchronization signals to determine a level of amplification for said at least one frequency component of said video signals.

28. **(New)** A method according to claim 26, wherein said synchronization signals comprise horizontal or vertical synchronization signals.--